(a) obtaining a biological sample from said organism, wherein said sample comprises one or more cells which may or may not comprise a polypeptide encoded by a nucleic acid comprising residues 792 to 884 of SEQ ID NO: 3;

(b) contacting said biological sample with an antibody which binds to a polypeptide encoded by a nucleic acid comprising residues 792 to 884 of SEQ ID NO: 3; and

(c) determining if said antibody binds to said polypeptide encoded by a nucleic acid comprising residues 792 to 884 of SEQ ID NO: 3 present in said biological sample, wherein binding of said antibody to said polypeptide identifies said organism as comprising one or more cells which are resistant to HIV infection.

48. ~~59~~. The method of claim 57 or 58, wherein said antibody is a monoclonal antibody.

49. ~~60~~. The method of claim 57 or 58 wherein said HIV is HIV-1 or HIV-2.

50. ~~61~~. A method for identifying an organism comprising one or more cells which are resistant to HIV infection comprising:

(a) obtaining a nucleic acid sample from said organism;

(b) amplifying a portion of the sequence of SEQ ID NO: 3 comprising residues 790-823 so as to generate an amplified product; and

D cont.

(c) detecting the presence of said amplified product, wherein the detection of said amplified product identifies said organism as comprising one or more cells which are resistant to HIV infection.

51. ~~62~~. A method for identifying an organism comprising one or more cells which are resistant to HIV infection comprising:

(a) obtaining a nucleic acid sample from said organism;

(b) contacting said nucleic acid sample with a first and a second oligonucleotide primer, wherein said first oligonucleotide primer is capable of specifically hybridizing with a portion of the sequence of SEQ ID NO: 3 comprising residues 790-792, and said second oligonucleotide primer specifically hybridizes with a sequence comprised by the complement of the sequence of SEQ ID NO: 3, wherein the primer extension product of one oligonucleotide primer, when separated from its complement, can serve as a template for the synthesis of the extension product of the other primer;

(c) subjecting the resulting mixture from step (b) to amplification comprising at least two cycles of nucleic acid strand separation, oligonucleotide primer annealing, and polymerase extension of annealed primers, so as to generate an amplified product; and

(d) detecting the presence of said amplified product, wherein the detection of said amplified product identifies said organism as comprising one or more cells which are resistant to HIV infection.

52. 63. The method of claim 62 wherein said HIV is HIV-1 or HIV-2.

53. 64. A method for identifying an organism comprising one or more cells which are resistant to HIV infection comprising:

(a) obtaining a nucleic acid sample from said organism;

(b) contacting said nucleic acid sample with a first and a second oligonucleotide primer, wherein said first oligonucleotide primer is capable of specifically hybridizing to a sequence within the portion of SEQ ID NO: 2 comprising residues 791-823, and said second oligonucleotide primer specifically hybridizes with a sequence comprised by the complement of the sequence of SEQ ID NO: 2, wherein the primer extension product of one oligonucleotide primer, when separated from its complement, can serve as a template for the synthesis of the extension product of the other primer;

D1 cont.

(c) subjecting the resulting mixture from step (b) to amplification comprising at least two cycles of nucleic acid strand separation, oligonucleotide primer annealing, and polymerase extension of annealed primers, so as to generate an amplified product if residues 791-823 of SEQ ID NO: 2 are present in the nucleic acid sample; and

(d) detecting the presence or absence of said amplified product, wherein the absence of said amplified product identifies said organism as comprising one or more cells which are resistant to HIV infection.

54. 65. A method for identifying an organism comprising one or more cells which are resistant to HIV infection comprising:

(a) obtaining a nucleic acid sample from said organism;

(b) contacting said nucleic acid sample with a first and a second oligonucleotide primer, wherein said first oligonucleotide primer is capable of specifically hybridizing with a portion of the sequence of SEQ ID NO: 2 upstream from residues 791-823, and said second oligonucleotide primer specifically hybridizes with a sequence comprised by the complement of

the sequence of SEQ ID NO: 2 downstream from residues 791-823, wherein the primer extension product of one oligonucleotide primer, when separated from its complement, can serve as a template for the synthesis of the extension product of the other primer;

(c) subjecting the resulting mixture from step (b) to amplification comprising at least two cycles of nucleic acid strand separation, oligonucleotide primer annealing, and polymerase extension of annealed primers, so as to generate an first amplified product; and

(d) determining the size of the first amplification product obtained in step (c), wherein the size of said first amplification product is indicative of said organism comprising one or more cells which are resistant to HIV infection.

D1 cont

55-66. The method of claim 65, wherein said step of determining comprises comparing the size of said amplification product to the actual or predicted size of a second amplification product obtained using said primers of step (b) in an amplification reaction wherein a nucleic acid molecule having the sequence of SEQ ID NO: 2 is uses as a template nucleic acid, wherein if the size of said first amplification product is smaller than the size of said second amplification product, then said organism is identified as comprising one or more cells which are resistant to HIV infection.

add E1

REMARKS

Upon entry of this amendment, claims 52-66 are pending. No new matter is introduced by this amendment. Support for the newly added claims may be found throughout the specification and at least at page 13-16, 27-28, and pages 31-34.